## Please replace the abstract with the following amended abstract:

The present invention relates to a A pulse height analyser for determination of the pulse height distribution of electronic pulses emprising includes a set of comparators with a common input for analogue to digital conversion of the electronic pulses, a set of latches wherein the inputs of the latches are connected to the outputs of respective comparators for recording passage of the corresponding threshold voltages by the rising edge of a pulse, a priority encoder connected to the latch outputs for determination of a pulse height category consisting of pulses with a pulse height within a pulse height interval defined by respective threshold voltages, and a micro controller that is adapted to count the number of pulses within each pulse height category.